Nantucket Pond Coalition Update

to Nantucket Select Board 9/29/21

The Nantucket Pond Coalition has good news to deliver today.

A "coalition" is defined as "a temporary alliance for combined action" and this year has had more alliances to restore the ponds than ever.

A year ago, we spoke about our test of the aquatic harvester, which removed over 30,000 lbs of excess vegetation from Hummock, the winning of the 604 (b) Federal Grant that determined the source of excess nutrients in the ponds, the re-negotiation of the pond permits to allow flood control, and our ongoing invasive mitigation campaign.

This fall we have three major updates:

First, working in collaboration with NLB, we have completed the initial treatment of phragmites and Japanese Knotweed at Consue Springs.

Here is the area that we treated (1) It was a difficult day of work. The large, meandering creek there and fallen tree trunks were a change from the pond shorelines.

and here are a couple" before and after" photos (2,3,4,5) of eventually what the harbor should look like from Orange and Union street after the mulching of the stalks this November. When the 14" plants are gone, the entire area will be open to the wetland and the harbor.

The spraying and mulching will continue each year for the next five years.

Clearing the phrags is the first step in a restoration that will also include dredging the Pond, restoring proper tidal and stormwater flow and basically reclaiming the natural wetland ecology.

Five years from now this will be one of the loveliest spots on Nantucket. We thank Rachel Freeman and the leadership of NLB for leading the charge in this long planned, major civic restoration.

Libby, anything you care to add?

The second update is the shoreline restoration of Northern Hummock Pond. This includes Mass Audubon's Lost Farm property, with leadership provided by Sam Kefferstan of Mass Audubon, and partially funded by abutters, and treatment of 30 acres of phrags along the entire western shore of Nantucket Conservation Foundation's Rams' Pasture -from the ocean to Millbrook Road. Thank you Cormac Collier and NCF.

In that the plants had encroached up to 30' on each side the "narrows" as it is called, we think this could double the current width of the narrows.

These two heavily trafficked, public areas will now have open vistas to each other across the pond and provide foot access to the pond itself.

Here is an image of the marsh master that conveys the scale of this difficult, physical work. The conning tower of the machine is 14' high.

The Consue Springs, Ram's Pasture and Lost Farm alliances complete both the entire shoreline of Hummock Pond as well as the island-wide campaign, started in 2014, to clear all the major public ponds on Nantucket of these invasive plants, which took root over 50 years ago.

It has truly been a "Coalition" of the efforts of TON, CPC, Madaket Conservation and Residents Associations, Hummock Pond Assoc, Miacomet Conservation League, NLB, Mass Audubon, NCF and the many abutters, joggers, dog walkers, kayakers, paddle boarders and others who have collaborated with us and financially supported our efforts.

The third and final update for today is the continued progress in thinking through the rationale of dredging Miacomet Pond, the smallest and therefore most affordable Great Pond to address.

The 2017 Federal study made clear that the bulk of excess nutrients leading to harmful algae blooms and excessive plant growth resides in the sediment on the bottom of the ponds which needs to be removed for the ponds to be healthy again.

You can put chemicals or herbicides or algaecides into the water, which we also think about, or you can dredge the sediment from the bottom of

the pond- really the only long term solution to "turning back the clock" on a pond.

We think it would be nice to have a crystal clear swimming hole at Miacomet but there is another reason we are interested, and that is: that we like the idea of recycling excess nutrients -where they do harm- to where they can do some good- such as being used for landscaping.

We ask ourselves: If we already have excess nutrients on island, why bring more nutrients in? Why not use what we already have?

working with Thais Fournier of Natural Resources and Emily Molden, of NLC, our two water quality experts, we have taken multiple core samples of the sediment of Hummock, Miacomet and the Pond at Consue and are having it tested for safe use and agricultural friability.

Here is an image of Emily Molden of NLC working with our limnologist Dr. Kenneth Wagner in the hard work if obtaining and cataloguing these surficial core samples.

We think this preliminary work should precede the town committing substantial resources to the permitting and design a dredging project.

Carl Jelleme, Jon Pierce and Eric Rogers of Toscana Corporation are partnering with us to help figure out if we can affordably access and then recycle the sediment nutrients in a long term, sustainable fashion.

A surprise to me personally has been the revelation that pond sand may prove as valuable as the sediment. If so, this could double the inherent value of dredge spoils.

The recycling of pond sediment could add to a sustainable ecology for Nantucket over the next century.

We are also flattered that the Nantucket High School, working with the Eagan Maritime Institute, have engaged with us in the "Sea of Opportunities" high school program that will now focus on ponds and wetlands this fall.

The eight grade debate this year will debate the question:

"Should the residents of Nantucket work to restore the pond and wetland ecosystems to their original state?"

These youngsters will reap the benefits of what is being done now. They will be my age in 2070! The island will be much different place then and now is the time to think through long term island sustainability!

In closing, I would like to thank the Town, in particular Libby Gibson and Jeff Carlson, The Conservation Commission and all the other conservation organizations, in particular the Nantucket Islands Land Bank, for their help and support in our work.

We look forward to next year!

Are there any questions?

Robert Williams
Nantucket Pond Coalition

Nantucket Pond Coalition

Update to Select Board September 29, 2021





















THANK YOU!

The Town of Nantucket has done a great job helping to restore and maintain the Great Ponds of Nantucket!